## ABSTRACT OF THE DISCLOSURE

An apparatus, method, and system for writing data to a hard disk drive synchronous with an apparent disk speed. The apparatus, method, and system has a phase-locked loop (PLL) to generate am output clock signal, wherein a clock interpolator responsive to phase rotation control is in the PLL feedback loop. The phase rotation control is proportional to the apparent disk speed, and the PLL output clock signal is also proportional to the apparent disk speed. A second clock interpolator further modifies the PLL output clock signal to provide pre-compensation control.